

## **ABSTRACT OF THE DISCLOSURE**

The present invention provides a method of transducing  
the conformational change undergone by a signaling aptamer upon  
5 binding a ligand to a differential signal generated by a reporter  
molecule. Also provided is a method of detecting and quantitating a  
ligand in solution using an aptamer conjugated to a fluorescent dye  
(signaling aptamer) to bind to the ligand and measuring the  
resultant optical signal generated.